

IN THE CLAIMS:

Claims 42, 43, and 130 are cancelled herein. No claims are amended or added. All pending claims are produced below. In addition, the status of each is also indicated below and appropriately noted as “Original”, “Currently Amended”, “Canceled”, “New”, “Withdrawn”, “Previously Presented”, and “Not Entered” as requested by the Office.

1. (Original) A system for video production, comprising a source of prerecorded video and audio signals from a prerecorded storage medium, a source of user supplied video and audio signals, a video and audio mixer for combining the prerecorded and user supplied signals to provide combined video and audio outputs, a production monitor connected to the mixer to display to the user the mixed signals, and a storage or reproduction device receiving a mixed video signal output from the mixer, wherein the prerecorded video signals from the prerecorded storage medium have a video signal content prekeyed with a keying signal to indicate areas within the prerecorded video signal to be replaced by the user supplied video signals, the mixer being operative to recognize the keying signal and substitute the user supplied video signal for those portions of said prerecorded video including said keying signal, and the mixer being operative to convert signals from the prompting channel into production control signals.

2. (Original) A system according to claim 1, wherein the control signals include user prompts displayed on the production monitor but absent from the combined video output.

3. (Original) A recording medium carrying a prerecorded video signal, prekeyed to define background of images defined by said video signal, which video signal, on playback by a user of the recording medium in apparatus configured to recognize the prekeyed background areas, will generate a signal into which may be inserted, at least in those background areas, a local signal provided by the user.

4. (Original) A recording medium according to claim 3, wherein the video signal prerecorded on the medium is predistorted by enhancing the brightness of at least the lowlights of the prerecorded signal outside said background areas while maintaining the background areas at or below black level.

5. (Original) A recording medium according to claim 3, wherein the recording medium further carries at least one audio channel, and at least one prompting channel including data translatable into instructions for control of the user provided video signal.

6. (Original) A recording medium according to claim 3, wherein the data in the prompting channel is translatable into video data optionally overlayable on video data from said video channel.

7. (Original) A system for generating video signals comprising prerecorded video signals overlaid on user provided video signals, comprising a recording medium carrying a prerecorded video signal, prekeyed to define background of images defined by said video signal, which video signal, on playback by a user of the recording medium in apparatus configured to recognize the prekeyed background areas, will generate a signal into which may be inserted, at least in those background areas, a local signal provided by the user, the video signal prerecorded on the medium being predistorted by enhancing the brightness of at least the lowlights of the prerecorded signal outside said background areas while maintaining the background areas at or below black level, and a mixer receiving video signals generated by playback of video signals from said recording medium and video signals from a user provided source, the mixer including means for enhancing the brightness of at least the lowlights of the user provided signal to a similar degree as the lowlight enhancement of the prerecorded signal, and a luminance keyer receiving said prerecorded signal and said lowlight enhanced user provided signal to produce an overlaid video signal in which the user signal is overlaid on the keyed portions of the prerecorded signal, and means for restoring the lowlights of the overlaid video signal to their original levels to provide an output signal.

8. (New, previously presented) An apparatus configured to combine video signals from a plurality of video sources, comprising:

an input configured to receive a first video signal from a pre-recorded video source and configured to receive a second video signal from a second video source, the first video signal defining a foreground and including pre-keyed background portions;

a mixer coupled with the input and configured to replace the identified pre-keyed background portions of the first video source with the second video signal to generate a synchronized video signal; and

an output coupled with the mixer and configured to provide the synchronized video signal to an output device.

9. (Cancelled)

10. (New, previously presented) The apparatus of claim 8, wherein the second video source comprises a camera for capturing video images.

11. (New, previously presented) The apparatus of claim 10, wherein the second video signal is a live video signal from the camera for capturing video images.

12. (New, previously presented) The apparatus of claim 8, wherein the mixer further comprises a switcher configured to detect the pre-keyed background portions of the first video signal and configured to generate a combined video signal from non-keyed portions of the first video signal and the second video signal.

13. (New, previously presented) The apparatus of claim 8, wherein the mixer further comprises a brightness enhancement circuit configured to enhance a brightness level of lowlights in the second video signal.

14. (New, previously presented) The apparatus of claim 8, wherein the first video signal comprises a prompting channel.

15. (New, previously presented) The apparatus of claim 14, wherein the prompting channel includes prompting signals.

16. (New, previously presented) The apparatus of claim 15, wherein the mixer further comprises a closed caption decoder configured to extract text from the prompting signal for display on the output device.

17. (New, previously presented) The apparatus of claim 15, wherein the mixer extracts the control signals from the prompting channel for controlling an external device coupled with the mixer.

18. (New, previously presented) The apparatus of claim 17, wherein the external device is the second video source.

19. (New, previously presented) The apparatus of claim 12, wherein the mixer further comprises a time base control unit configured to receive the first video signal and the second video signal and configured to synchronize the first video signal and the second video signal.

20. (Cancelled)

21. (New, previously presented) The apparatus of claim 8, wherein the output device comprises one from a group consisting of a television and a video monitor.

22. (Cancelled)

23. (New, previously presented) The apparatus of claim 8, wherein the pre-keyed portions comprise one from a group consisting of chroma-key portions and luminance key portions.

24. (New, previously presented) The apparatus of claim 8, wherein the mixer is further configured to identify the pre-keyed background portions of the first video signal prior to replacement of the pre-keyed background portions.

25. (New, previously presented) A method for producing a combined video signal from a plurality of video signals from a plurality of video sources, comprising:

receiving a first video signal from a pre-recorded video source, the first video signal including a keying signal;
receiving a second video signal from second video source; and
replacing the keying signal with the second video signal to generate a video signal comprising portions of the first video signal and the second video signal.

26. (New, previously presented) The method for producing the combined video signal of claim 25, wherein the first video signal further comprises a prompting signal.

27. (New, previously presented) The method for producing the combined video signal of claim 26, wherein the prompting signal includes at least one from a group consisting of text, dimension indicators, and camera control signals.

28. (New, previously presented) The method for producing the combined video signal of claim 26, further comprising the step of generating screen prompts from the prompting signal.

29. (New, previously presented) The method for producing the combined video signal of claim 25, further comprising the step of extracting a control signal from the first video signal.

30. (New, previously presented) The method for producing the combined video signal of claim 29, wherein the control signal is adapted to control the second video source.

31. (New, previously presented) The method for producing the combined video signal of claim 25, wherein the keying signal comprises one from a group consisting of a chrominance signal, a luminance signal, and a color signal.

32. (New, previously presented) The method for producing the combined video signal of claim 25, wherein the step of replacing further comprises:

reading a luminance signal from the first video signal; and
blocking at least a portion of the first video signal and passing at least a portion of the
second video signal in response to a value of the luminance signal being
greater than or equal to a predetermined value.

33. (New, previously presented) The method for producing the combined video signal of claim 25, wherein the step of replacing further comprises:

reading a luminance signal from the first video signal; and
passing at least a portion of the first video signal and passing at least a portion of the
second video signal in response to a value of the luminance signal being
greater than or equal to a predetermined value.

34. (New, previously presented) The method for producing the combined video signal of claim 32, wherein the luminance signal of the first video signal further comprises a prompting signal and the method further comprising:

passing at least a portion of the luminance signal of the first video signal to a closed
caption decoder; and
decoding the prompting signal to recover data therein.

35. (New, previously presented) The method for producing the combined video signal of claim 34, further comprising:

passing the data to a processing system; and
generating control signals from the data.

36. (New, previously presented) The method for producing the combined video signal of claim 25, further comprising:

reading a chrominance signal from the first video signal; and
blocking at least a portion of the first video signal and passing at least a portion of the second video signal in response to a value of the chrominance signal being greater than or equal to a predetermined value.

37. (New, previously presented) The method for producing the combined video signal of claim 25, further comprising:

reading a chrominance signal from the first video signal; and
passing at least a portion of the first video signal and blocking at least a portion of the second video signal in response to a value of the chrominance signal being less than or equal to the predetermined value.

38. (New, previously presented) The method for producing the combined video signal of claim 37, wherein the chrominance signal of the first video signal further comprises a prompting signal and the method further comprising:

passing at least a portion of the chrominance signal of the first video signal to a closed caption decoder; and
decoding the prompting signal to recover data therein.

39. (New, previously presented) The method for producing the combined video signal of claim 38, further comprising:

passing the data to a processing system; and
generating control signals from the data.

40. (New, previously presented) The method for producing the combined video signal of claim 25, further comprising identifying the keying signal in the first video signal prior to replacing the keying signal.

41. (New, previously presented) A method of producing a video recording having a first video signal for use with mixing with another video signal, the method comprising:
capturing on a storage medium the first video signal from a first video source;
identifying a portion of the first video signal for later overlay by a portion of an unkeyed second video signal from a second video source;
keying the identified portion of the first video signal; and
recording the captured and keyed first video signal on a recording medium.

42. (Cancelled)

43. (Cancelled)

44. (New, previously presented) The method for producing the video recording of claim 41, wherein the video signal includes a prompting channel.

45. (New, previously presented) The method of producing the video recording of claim 44, further comprising providing a prompting signal in the prompting channel for providing one from a group comprising on-screen text prompts and control signals.

46. (Cancelled)

47. (New, previously presented) The method for producing the video recording of claim 46, wherein the second video source is a camera configured to capture video signals.

48. (New, previously presented) The method for producing the video recording of claim 47, wherein the camera configured to capture video signals captures live video signals.

49. (Cancelled)

50. (Cancelled)

51. (New, previously presented) A video playback device configured to provide video signals comprising a portion of a first video signal and a portion of a second video signal, the video playback device comprising:

a playback mechanism configured to play a pre-recorded video medium, the pre-recorded medium further comprising a pre-recorded video signal including a pre-keyed portion; and

a mixer coupled with the playback mechanism and configured to identify the pre-keyed portion of the pre-recorded video signal and configured to receive a second video signal from a video source, and configured to replace either the pre-keyed portion or a non-pre-keyed portion of the pre-recorded video signal with the second video signal to generate an output video signal.

52. (New, previously presented) The video playback device of claim 51, further comprising an external port configured to couple with an external device for transmitting the output video signal.

53. (Cancelled)

54. (Cancelled)

55. (New, previously presented) The apparatus of claim 51, wherein the video source comprises a camera for capturing video signals.

56. (New, previously presented) The apparatus of claim 55, wherein the second video signal from the camera for capturing video signals comprises a live video signal.

57. (New, previously presented) The apparatus of claim 51, wherein the mixer further comprises a switcher configured to detect the pre-keyed portions of the pre-recorded video signal.

58. (New, previously presented) The apparatus of claim 57, wherein the mixer further comprises a brightness enhancement circuit configured to enhance a brightness level of lowlights in the second video signal.

59. (New, previously presented) The apparatus of claim 57, wherein the pre-recorded video signal further comprises a prompting channel.

60. (New, previously presented) The apparatus of claim 59, wherein the prompting channel includes prompting signals.

61. (New, previously presented) The apparatus of claim 59, wherein the mixer further comprises a closed caption decoder configured to extract text from the prompting channel for display on an external device.

62. (New, previously presented) The apparatus of claim 59, wherein the mixer extracts control signals from the prompting channel for controlling an external device coupled with the mixer.

63. (Cancelled)

64. (New, previously presented) The apparatus of claim 57, wherein the mixer further comprises a time base control unit configured to receive the pre-recorded video signal and the second video signal and configured to synchronize the pre-recorded video signal and the second video signal.

65. (Cancelled)

66. (Cancelled)

67. (New, previously presented) The apparatus of claim 51, wherein the pre-keyed portions of the pre-recorded video signal comprise one from a group consisting of chroma-key portions and luminance key portions.

68. (New, previously presented) The apparatus of claim 51, wherein the pre-recorded medium comprises a video source connected through a communications network.

69. (New, previously presented) An apparatus configured to combine video signals from a plurality of video sources, comprising:

an input configured to receive a first video signal from a pre-recorded video source and configured to receive a second video signal from a second video source, the first video signal including a keyed portion and a non-keyed portion;

a mixer coupled with the input and configured to replace either the keyed portion or the non-keyed portion with the second video signal to generate a synchronized video signal; and

an output coupled with the mixer and configured to provide the synchronized video signal for an output device.

70. (New, previously presented) The apparatus of claim 69, wherein the keyed portion is a background portion and the non-keyed portion is a foreground portion of the first video signal.

71. (New, previously presented) The apparatus of claim 69, wherein the non-keyed portion is a background portion and the keyed portion is a foreground portion of the video signal.

72. (Cancelled)

73. (New, previously presented) The apparatus of claim 69, wherein the second video source comprises a camera for capturing video.

74. (New, previously presented) The apparatus of claim 73, wherein the second video signal comprises a live video signal from the camera for capturing video.

75. (New, previously presented) The apparatus of claim 69, wherein the mixer further comprises a switcher configured to detect the non-keyed portion of the first video signal and configured to generate the synchronized video signal from the non-keyed portions of the first video signal and the second video signal.

76. (New, previously presented) The apparatus of claim 69, wherein the mixer further comprises a switcher configured to detect the keyed portion of the first video signal and configured to generate the synchronized video signal from the keyed portions of the first video signal and the second video signal.

77. (New, previously presented) The apparatus of claim 69, wherein the mixer further comprises a brightness enhancement circuit configured to enhance a brightness level of lowlights in the second video signal.

78. (New, previously presented) The apparatus of claim 69, wherein the first video signal further comprises a prompting channel.

79. (New, previously presented) The apparatus of claim 78, wherein the prompting channel includes prompting signals.

80. (New, previously presented) The apparatus of claim 79, wherein the mixer further comprises a closed caption decoder configured to extract text from the prompting signal for display on the output device.

81. (New, previously presented) The apparatus of claim 78, wherein the mixer extracts the control signals from the prompting channel for controlling an external device coupled with the mixer.

82. (Cancelled)

83. (New, previously presented) The apparatus of claim 69, wherein the mixer further comprises a time base control unit configured to receive the first video signal and the second video signal to synchronize the first video signal and the second video signal.

84. (Cancelled)

85. (Cancelled)

86. (Cancelled)

87. (New, previously presented) The apparatus of claim 69, wherein the keyed portion of the first video signal comprises a chroma-key portion.

88. (New, previously presented) The apparatus of claim 69, wherein the keyed portion of the first video signal comprises a luminance key portion.

89. (New, previously presented) The apparatus of claim 69, wherein the non-keyed portion of the first video signal comprises a chroma-key portion.

90. (New, previously presented) The apparatus of claim 69, wherein the non-keyed portion of the first video signal comprises a luminance key portion.

91. (New, previously presented) A method for combining video signals from a plurality of video signal sources, comprising:

receiving a first video signal from a pre-recorded video source, the first video signal further comprising a keyed portion and a non-keyed portion;
receiving a second video signal from second video source; and
replacing either the keyed portion or the non-keyed portion of the first video signal with the second video signal to generate a third video signal comprising portions of the first video signal and the second video signal.

92. (New, previously presented) The method for combining video signals of claim 91, wherein the first video signal further comprises a prompting signal.

93. (New, previously presented) The method for combining video signals of claim 92, wherein the prompting signal includes at least one from a group consisting of text, dimension indicators, and camera control signals.

94. (New, previously presented) The method for combining video signals of claim 92, further comprising the step of generating screen prompts from the prompting signal.

95. (New, previously presented) The method for combining video signals of claim 91, further comprising the step of extracting a control signal from the first video signal.

96. (New, previously presented) The method for combining video signals of claim 95, wherein the control signal is adapted to control the second video source.

97. (New, previously presented) The method for combining video signals of claim 91, wherein the keyed portion of the first video signal comprises a background portion.

98. (New, previously presented) The method for combining video signals of claim 91, wherein the non-keyed portion of the first video signal comprises a background portion.

99. (New, previously presented) The method for combining video signals of claim 91, wherein the keyed portion of the first video signal comprises a foreground portion.

100. (New, previously presented) The method for combining video signals of claim 91, wherein the non-keyed portion of the first video signal comprises a foreground portion.

101. (New, previously presented) The method for combining video signals of claim 91, wherein the keyed portion of the first video signal is a chrominance signal.

102. (New, previously presented) The method for combining video signals of claim 91, wherein the non-keyed portion of the first video signal is a chrominance signal.

103. (New, previously presented) The method for combining video signals of claim 91, wherein the keyed portion of the first video signal is a luminance signal.

104. (New, previously presented) The method for combining video signals of claim 91, wherein the non-keyed portion of the first video signal is a luminance signal.

105. (New, previously presented) The method for combining video signals of claim 91, further comprising:

reading a luminance signal from the first video signal; and

blocking at least a portion of the first video signal and passing at least a portion of the second video signal in response to a value of the luminance signal being greater than or equal to a predetermined value.

106. (New, previously presented) The method for combining video signals of claim 105, wherein the luminance signal of the first video signal further comprises a prompting signal and the method further comprising:

passing at least a portion of the luminance signal of the first video signal to a closed caption decoder; and
decoding the prompting signal to recover data therein.

107. (New, previously presented) The method for combining video signals of claim 106, further comprising:

passing the data to a processing system; and
generating control signals from the data.

108. (New, previously presented) The method for combining video signals of claim 91, further comprising:

reading a chrominance signal from the first video signal; and
blocking at least a portion of the first video signal and passing at least a portion of the second video signal in response to a value of the chrominance signal being greater than or equal to a predetermined value.

109. (New, previously presented) The method for combining video signals of claim 108, wherein the chrominance signal of the first video signal further comprises a prompting signal and the method further comprising:

passing at least a portion of the chrominance signal of the first video signal to a closed caption decoder; and
decoding the prompting signal to recover data therein.

110. (New, previously presented) The method for combining video signals of claim 109, further comprising:

passing the data to a processing system; and
generating control signals from the data.

111. (Cancelled)

112. (New, previously presented) The method for combining video signals of claim 91, wherein the second video source comprises a video camera.

113. (New, previously presented) The method for combining video signals of claim 91, wherein the third video signal comprises an output video signal.

114. (New, previously presented) The method for combining video signals of claim 113, further comprising supplying the output video signal to an output device.

115. (New, previously presented) The method for combining video signals of claim 114, wherein the output device comprises one from a group of a visual display device and a data signal storage device.

116. (New, previously presented) The method for combining video signals of claim 91, wherein the first video source comprises a computing device connected through a communications network.

117. (New, previously presented) An apparatus configured to generate a synchronized video signal from a plurality of video signals, comprising:

an input means for receiving a first video signal from a means for storing and for receiving a second video signal from a means for capturing video, the first video signal including a keyed portion and a non-keyed portion;
a mixing means coupled with the input means for replacing either the keyed portion or the non-keyed portion with the second video signal and for generating a synchronized video signal; and

an output means coupled with the mixing means for outputting the synchronized video signal to an output device.

118. (New, previously presented) The apparatus of claim 117, wherein the keyed portion is a background portion and the non-keyed portion is a foreground portion of the first video signal.

119. (New, previously presented) The apparatus of claim 117, wherein the non-keyed portion is a background portion and the keyed portion is a foreground portion of the video signal.

120. (Cancelled)

121. (New, previously presented) The apparatus of claim 117, wherein the means for capturing video comprises a second video source.

122. (New, previously presented) The apparatus of claim 121, wherein the second video signal comprises a live video signal from the second video source.

123. (New, previously presented) The apparatus of claim 117, wherein the means for mixing further comprises a means for detecting the non-keyed portion of the first video signal and a means for generating the synchronized video signal from the non-keyed portions of the first video signal and the second video signal.

124. (New, previously presented) The apparatus of claim 117, wherein the means for mixing further comprises means for detecting the keyed portion of the first video signal and a means for generating the synchronized video signal from the keyed portions of the first video signal and the second video signal.

125. (New, previously presented) The apparatus of claim 117, wherein the means for mixing further comprises a means for enhancing a brightness level of lowlights in the second video signal.

126. (New, previously presented) The apparatus of claim 117, wherein the first video signal further comprises a prompting channel.

127. (New, previously presented) The apparatus of claim 126, wherein the prompting channel includes prompting signals.

128. (New, previously presented) The apparatus of claim 127, wherein the means for mixing further comprises a means for extracting text from the prompting signal for display on the output device.

129. (New, previously presented) The apparatus of claim 126, wherein the means for mixing further comprises a means for extracting the control signals from the prompting channel for controlling an external device.

130. (Cancelled)

131. (Cancelled)

132. (Cancelled)

133. (Cancelled)

134. (New, previously presented) The apparatus of claim 117, wherein the keyed portion of the first video signal comprises a chroma-key portion.

135. (New, previously presented) The apparatus of claim 117, wherein the keyed portion of the first video signal comprises a luminance key portion.

136. (New, previously presented) The apparatus of claim 117, wherein the non-keyed portion of the first video signal comprises a chroma-key portion.

137. (New, previously presented) The apparatus of claim 117, wherein the non-keyed portion of the first video signal comprises a luminance key portion.

138. (New, previously presented) The apparatus of claim 117, wherein the means for mixing comprises a mixer.

139. (New, previously presented) The apparatus of claim 8, wherein the first video source comprises a pre-recorded storage medium.

140. (New, previously presented) The apparatus of claim 8, wherein the first video source comprises a tape for storing video.

141. (New, previously presented) The apparatus of claim 140, wherein the tape comprises a video tape.

142. (New, previously presented) The apparatus of claim 8, wherein the first video source comprises a disk for storing video.

143. (New, previously presented) The apparatus of claim 142, wherein the disk comprises a video disc.

144. (New, previously presented) The apparatus of claim 8, wherein the output devices comprise a device for recording video.

145. (New, previously presented) The apparatus of claim 144, wherein the device comprises a recorder.

146. (New, previously presented) The apparatus of claim 41, wherein the recording medium comprises a recorder.

147. (New, previously presented) The video playback device of claim 51, wherein the pre-recorded medium comprises a tape.

148. (New, previously presented) The video playback device of claim 147, wherein the tape comprises a video tape.

149. (New, previously presented) The video playback device of claim 51, wherein the pre-recorded medium comprises a disk.

150. (New, previously presented) The video playback device of claim 149, wherein the disk comprises a video disc.

151. (New, previously presented) The video playback device of claim 52, wherein the external port couples with a device for recording video.

152. (New, previously presented) The video playback device of claim 151, wherein the device for recording video comprises a recorder.

153. (New, previously presented) The apparatus of claim 8, wherein the first video signal comprises one of a composite signal and an s-video signal.

154. (New, previously presented) The video playback device of claim 51, wherein the external port couples with a device for recording video.

155. (New, previously presented) The video playback device of claim 69, wherein the external port couples with a device for recording video.

156. New, previously presented) The video playback device of claim 117, wherein the external port couples with a device for recording video.

157. (New, previously presented) The video playback device of claim 51, wherein the external device comprises a device for viewing video images.

158. (New, previously presented) The video playback device of claim 51, wherein the external device comprises a device for recording video signals.

159. (New, previously presented) The video playback device of claim 62, wherein the external device comprises a device for displaying video images.

160. (New, previously presented) The apparatus of claim 81, wherein the external device comprises a device for displaying video images.

161. (New, previously presented) The apparatus of claim 69, wherein the output device comprises a device for displaying video images.

162. (New, previously presented) The apparatus of claim 117, wherein the output device comprises a device for displaying video images.

163. (New, previously presented) The apparatus of claim 117, wherein the output device comprises a device for recording video signals.

164. (New, previously presented) The method of producing the video recording of claim 41, wherein the first video signal comprises entertainment related video content.

165. (New, previously presented) The apparatus of claim 69, wherein the first video source comprises a medium for storing recorded images.

166. (New, previously presented) The apparatus of claim 165, wherein the medium comprises a tape or a disk.

167. (New, previously presented) The method of claim 91, wherein the first video source comprises a medium for storing recorded images.

168. (New, previously presented) The apparatus of claim 167, wherein the medium comprises a tape or a disk.

169. (New, previously presented) The apparatus of claim 117, wherein the first video source comprises a medium for storing recorded images.

170. (New, previously presented) The apparatus of claim 169, wherein the medium comprises a tape or a disk.